WHAT IS CLAIMED IS:

1.   A money identifying method, comprising the steps of:

obtaining a surface image of money;

extracting a particular threshold calculation range of the obtained surface

5   image;

determining a density histogram of the extracted threshold calculation range;

calculating a binary threshold value for binarizing from the determined density

histogram by a discriminating analysis;

binarizing the obtained surface image of the money on the basis of the

10   calculated binary threshold value; and

identifying the money based on the binary image.

2.   The money identifying method according to claim 1, wherein the step of

extracting the threshold calculation range is performed by extracting an image of a

15   predetermined area containing a feature area subject to judgment of the money and not

containing a background.

3.   The money identifying method according to claim 2, wherein the money is a

coin, and wherein the step of extracting the threshold calculation range is performed by:

20   determining center coordinates and radius of the coin on the basis of the

surface image; and

extracting the image of the predetermined area on the basis of the determined

center coordinates and radius.

25   4.   A money identifying device, comprising:

image obtaining means for obtaining a surface image of money;

extracting means for extracting an image of a particular threshold calculation

range of the surface image of the money obtained by the image obtaining means;

binary threshold calculation means for determining a density histogram of the image of the threshold calculation range extracted by the extracting means and calculating a binary threshold value for binarizing from the determined density histogram by applying a discriminating analysis;

5   binarizing means for binarizing the surface image obtained by the image obtaining means using the binary threshold value calculated by the binary threshold calculation means; and

identifying means for identifying the money on the basis of the binary image binarized by the binarizing means.

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5.   The money identifying device according to claim 4, wherein the image obtaining means comprises:

lighting means for illuminating a surface of the money; and

image-pickup means for taking a picture of the surface of the money

15   illuminated by the lighting means.

6.   The money identifying device according to claim 4, wherein the extracting means extracts an image of a predetermined area containing a feature area subject to the judgment of the money and not containing a background.

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7.   The money identifying device according to claim 6, wherein the money is a coin, and wherein the extracting means comprises:

determining means for determining center coordinates and radius of the coin on the basis of the surface image; and

25   area extracting means for extracting the image of the predetermined area on the basis of the center coordinates and radius of the coin determined by the determining means.

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